

## ABSTRACT OF THE DISCLOSURE

Methods and system for chromatic dispersion compensation in disperser-combiner optical systems. The chromatic dispersion in disperser-combiner optical systems is substantially compensated by, after separating the input optical radiation into distinct chromatic components, propagating the distinct chromatic components through the optical system so that a pre-selected relationship between optical path lengths through the optical systems of the distinct chromatic components is obtained, where the pre-selected relationship substantially compensates the chromatic dispersion. The pre-selected relationship is obtained by reflecting the distinct chromatic components from a suitably placed and shaped pixellated optical volume reflector. After propagating through the optical system, the distinct chromatic components are recombined.